



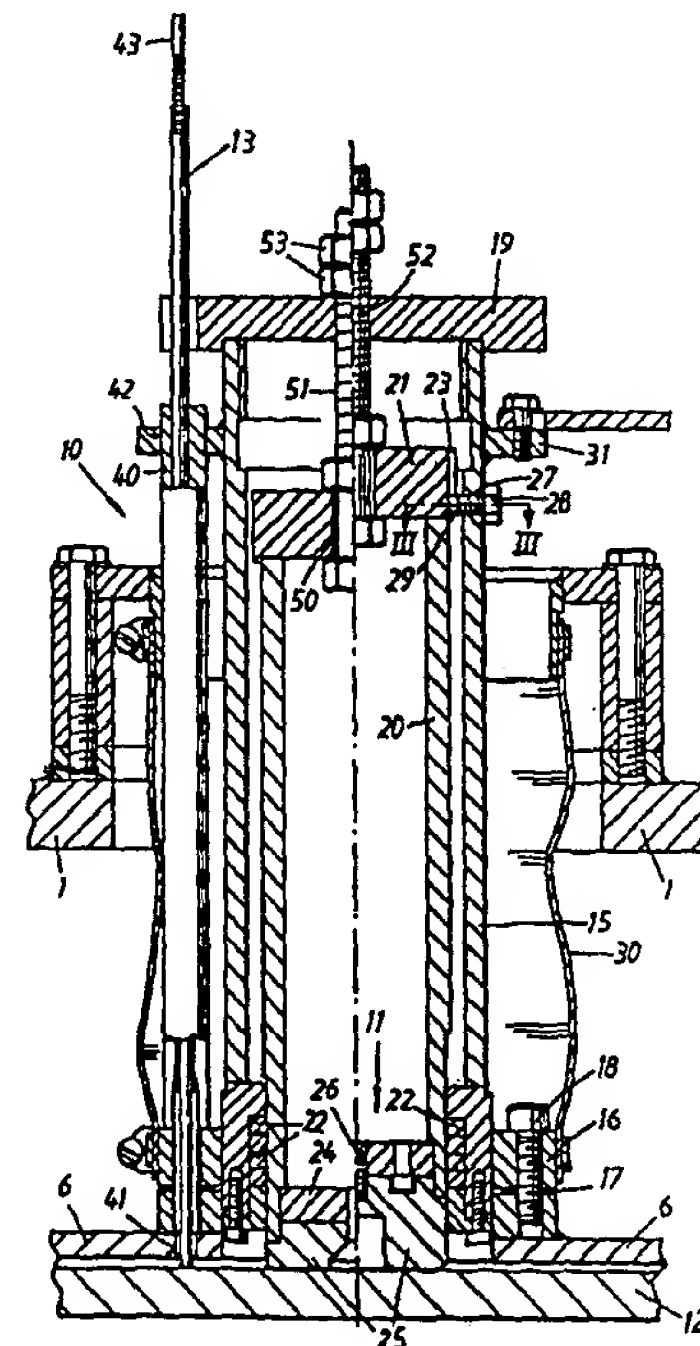
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(21) International Application Number: PCT/SE96/00713 (22) International Filing Date: 31 May 1996 (31.05.96) (30) Priority Data: 9502100-2 8 June 1995 (08.06.95) SE (71) Applicant: LJUNGSTRÖM TECHNOLOGY AB [SE/SE]; P.O. Box 15085, S-104 65 Stockholm (SE). (72) Inventors: KARLSSON, Kurt; Njupkärrsvägen 5, S-135 55 Tyresö (SE). WESTERLUND, Dag; Svetsarvägen 21, S- 175 73 Järfälla (SE). (74) Agent: WALDINGER, Åke; Ljungström Technology AB, P.O. Box 15085, S-104 65 Stockholm (SE).		(81) Designated States: CZ, HU, PL, TR, Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> <i>In English translation (filed in Swedish).</i>	

(54) Title: **ROTARY REGENERATIVE HEAT EXCHANGER**

(57) Abstract

The invention relates to a regenerative, rotating heat exchanger of the kind having a cylindrical part containing regenerative mass and sector plates (6) separating media flows, which sector plates have outer ends provided with sliding shoes (25) displaceable perpendicular to the sector plates and lockable, and maintaining a predetermined clearance between the ends of the sector plates (6) and an edge flange (12) or similar member of the cylindrical part against which edge flange (12) the sliding shoes (25) are arranged to slide. The sliding shoes (25) have wearing surfaces made of carbon or graphite and can be screwed by a screwing mechanism (51, 52) forward some mm at a time in correspondence to the abrasion. According to the invention an essential reduction of the wearing velocity is obtained due to the fact that each sliding shoe is provided with a guiding means (23, 29) which at the forward displacement of the sliding shoe (25) prevents its turning thereby maintaining a constant abrasion pattern.



C L A I M S

1. Regenerative heat exchanger comprising two parts, one of which being rotatable in relation to the other around a common centre axis, in which one of the parts (2) is essentially cylindrical and contains a regenerative mass (3) and the remaining part (1) contains media ducts with axially directed inlets and outlets for heat emitting and heat absorbing media, which inlets and outlets are mutually separated by sector shaped plates (6,8) for sealing purposes positioned close to the end surfaces of the cylindrical part, which plates are pivotally connected to axially fixed centre plates (5,7) attached to said remaining part at the ends of the cylindrical part, which sector shaped plates (6,8) at their radially outer ends are provided with devices (10) each comprising at least one support means (11) for setting a clearance between the ends of the plates and an edge flange (12) or similar member at each end of the cylindrical part (2), which support means (11) is journalled axially displaceable in a socket (15) at the respective sector plate end (6,8) perpendicular to the sector plate and adjustable by means of a screw mechanism (50-53) attached to the sector plate end, characterized in that the support means (11,20,25) and its socket (15) are provided with a guiding means (23,29) preventing turning of the support means in the socket.

2. Heat exchanger according to claim 1, characterized in that the support means (25) is unrotatably attached to a carrier (20) movably journalled in the socket (15), and that the carrier is prevented from turning in the socket by the guiding means (23,29).

3. Heat exchanger according to claim 1 or 2, characterized in that the guiding means acting between on one hand the socket (15) and on the other hand the carrier (20) and/or the support means (25) comprises a groove (23) in one of these parts (20), in which groove a pin (29) attached to the other part (15) protrudes.